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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,424	06/24/2003	Gregory L. Bluem	51720US020	9617
32692	7590	04/22/2004	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			SELLERS, ROBERT E	
			ART UNIT	PAPER NUMBER

1712

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/602,424

Applicant(s)

BLUEM ET AL.

Examiner

Robert Sellers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 6 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 5, 6, 9-11 and 13-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election-requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/6/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. Applicant's election with traverse of Group I in the response filed April 6, 2004 is acknowledged. The traversal is on the grounds that "a search of one group of claims will reveal art to the other. This is not found persuasive because the search of Group I does not require the additional chain transfer agent of Group II which requires a further search. MPEP § 808.02, the section entitled "Related Inventions," confirms the establishment of separate classifications of each invention "in order to establish reasons for insisting upon restriction."

The requirement is still deemed proper and is therefore made FINAL.

Claims 13-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction requirement in the response filed April 6, 2004. Claims 5, 6 and 9-11 are withdrawn as being directed to non-elected species.

2. The reinforcing "monomer" defined in claim 8 should be amended to "comonomer" for the sake of consistency and proper antecedent basis with claim 1 wherefrom it depends which denotes the component as a comonomer in line 4. Withdrawn claim 3 employs improper Markush language and line 2 should be corrected to "electrically conductive material is selected from the group consisting of nickel, silver, copper and gold particles."

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese Patent No. 3-220217.

3. Japanese Patent No. 3-220217 shows a composition comprising 79.6% by weight of a blend of **2-ethylhexyl acrylate** (deemed to be a species of alkyl acrylate monomer (a) being a (meth)acrylate of a non-tertiary alcohol with from 4-18 carbon atoms in the alkyl moiety as required by claim 7 according to page 6, lines 10-11 and 13 of the specification) with **methyl methacrylate**, 20.4% of a **butadiene-methyl methacrylate-styrene graft copolymer** (Chemical abstract, page 2, lines 4-5 and Chemical abstracts registry no. 17080-92-2) and additives.

4. The prior art composition used as a coating would inherently function as the claimed screen-printable adhesive based on the equivalent 2-ethylhexyl acrylate monomer and butadiene-methacrylate-styrene graft copolymer of the reference and claims. The burden of proof shifts to applicants to rebut the inherent utility of the Japanese patent (*In re Fitzgerald*, 205 USPQ 594, CCPA 1980 and MPEP §§ 2112-2112.02).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 3-220217 as applied to claims 1-4 and 7 hereinabove, and further in view of PCT Publication No. WO 95/13328.

5. The Japanese patent espouses various additives but the abstracts do not name the claimed thixotropic agent. The PCT publication discloses a pressure sensitive adhesive derived from an alkyl acrylate monomer such as ethylhexyl acrylate (page 3, line 20) and a thermosetting resin wherein "the monomers may be mixed with a thixotropic agent such as fumed hydrophilic silica to achieve a coatable thickness (page 11, lines 14-15)."

6. It would have been obvious to incorporate the mix the monomer blend of the Japanese patent with the thixotropic agent of the PCT publication in order to achieve a coatable thickness.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Mazurek et al. Patent No. 5,264,278 and Japanese Patent No. 2-11684 set forth pressure sensitive adhesives prepared from alkyl acrylate monomers.
8. Tobing et al. Patent No. 5,262,479 is directed to pressure sensitive hot melt adhesive containing a Kane Ace modifier of a styrene-butadiene core with a methyl methacrylate shell.
9. Case et al. Patent No. 5,209,983, Japanese Patent No. 62-162541 and PCT Publication No. WO 91/18043 are drawn to adhesives obtained from the semi-crystalline polymer species of claim 6.
10. Chen et al. Patent No. 5,043,102 describes a conductive screen printable adhesive comprising an epoxy resin, an unsaturated monomer and silver particles.

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Any administrative inquiries can be obtained by accessing the Patent Application Information Retrieval (PAIR) system. Published applications are available through either private or public PAIR. Unpublished applications are available via private PAIR only. Consult <http://pair-direct.uspto.gov> or contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



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Art Unit 1712